Nori® Protect XCP
Weather Resistant Two-Component Screen Printing Protective Lacquer

Area of Application

Nori® Protect XCP is a solvent-based weather resistant two-component screen printing protective lacquer for numerous substrates.

Nori® Protect XCP is suitable for printing on polycarbonate, rigid PVC, polystyrene, ABS and SAN, pre-treated PET films and corona-treated polyolefins (PE and PP) as well as for metal und aluminum.

Decorated surfaces can be overprinted resp. protected with Nori® Protect XCP (pre-tests are necessary).

The lacquer has been formulated user-friendly in terms of ingredients.

Characteristics

- weather resistant
- resistant towards chemicals, cleaning agents and fuels
- formable on suitable substrates
- constitutionally free of:  
  - Aromates
  - Cyclohexanone
  - Phthalates

Weather Resistance

When printed on suitable substrates, Nori® Protect XCP is weather resistant. For long-term outdoor durability, a screen fabric of 61-64 threads/cm (156-64 threads/inch) or coarser is recommended.

Performed Proell weathering test: UVR according ASTM-G 53-77
Weathering period 3.000 h (UV-A)
Substrates:
  - Makrofol® DE 1-1
  - Makrofol® DE 1-1 printed with NORIPHAN® HTR N 945
Mesh: 61-64 Y threads/cm (156-64 threads/inch)

Pre-tests are necessary!

Lacquer Versions

Nori® Protect XCP 1/001 (silicone-based additives)
Silicone-free and matt versions are available on request.

Mixing Ratio and Pot Life

Hardener 028
Addition: 5 %  (hardener addition before thinning)
Pot life: 8 h

Thinning

Thinner M 219 (slow)
Thinner M 218 (medium)
Thinner F 003 (fast)
Addition: ca. 15 – 20 %
Nori® Protect XCP

Stencil
Solvent resistant emulsions must be used. Excellent results during long production runs are achieved by using Pröll Diazo-UV-Polymer Emulsion Norikop 10 HQ.

Drying
Tunnel dryer: 60 – 80 °C (140 – 175 °F) depending on substrate
Curing for crosslinking
PC films: 90 °C (195 °F), 3 h
Heat sensitive films: 65 °C (150 °F), 7 days
Metallic substrates:
- 120 °C (250 °F), 1 h
- 150 °C (300 °F), 0,5 h
- 180 °C (355 °F), 20 min.

Cleaning Screens and Utensils
Screens and utensils which came into contact with two-component lacquers must be cleaned immediately because cured two-component lacquers become solvent resistant.

Screens and utensils can be cleaned with UNI-CLEANER FP61 or UNI-REIN A III.

Shelf Life
The shelf life stated on the label assures the product’s quality and refers to unopened original cans stored in a dry place at temperatures between 5 °C (40 °F) and 25 °C (75 °F).

Shelf life of Hardener 028 is 6 months.
Opened containers of hardener must be tightly closed immediately after use as the hardener reacts with moisture in the air.

Important
Allow the lacquer as well as all the auxiliaries to be added to adjust to room temperature in the closed container before use.

Printing results, to a large extent, depend on the substrate, buildup of the ink to be overprinted, as well as the printing and application conditions. We recommend checking your printing materials under your conditions of use prior to any production runs. Materials that are supposed to be identical may vary from manufacturer to manufacturer and even from batch to batch. Substrates or ink layers may have been treated with or contain sliding agents, antistatics or other additives which will impair the adhesion of the lacquer.

This is a test product which is still in development. For this reason, no assurances are currently given as to type conformity, processability and long-term performance characteristics. Therefore the customer uses the product entirely at his own risk with no guarantee.

Before starting a production run, it is necessary to test samples of each newly designed part systematically with regard to the specifications for the intended use (e. g. climatic chamber, resistance, etc.).

The information contained in the technical information/instruction sheets or other product information sheets is based on product testing conducted by Pröll. Because printing and environmental factors critically affect each individual ink application, the above mentioned information and instructions represent only general recommendations concerning product characteristics and directions for use and should not be construed as representing express warranties regarding the product. The information and instructions in no way release the purchaser from his obligation to verify and test the inks and their application for the specific request, regarding: product characteristics, weather resistance, mixing proportions, gloss, thinning, special mixtures, printability, drying speed, cleaning, effects on or of other materials to be contacted and safety precautions. All details contained in the instruction sheet "General Information on Screen Printing Inks" are to be considered. The further manufacture and use of products containing our inks by the purchaser takes place beyond our control, and the responsibility for further application and use of our product resides solely with the purchaser. Pröll disclaims any warranties, express or implied.

This information supersedes all previous technical information.